

**BEST AVAILABLE COPY**  
**PATENT COOPERATION TREATY**

**PCT**

**INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY**

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

REC'D 12 JAN 2006

WIPO

PCT

Applicant's or agent's file reference INT1125MAJR	<b>FOR FURTHER ACTION</b>		See Form PCT/PEA/416
International application No. PCT/ZA2004/000071	International filing date (day/month/year) 25.06.2004	Priority date (day/month/year) 15.07.2003	
International Patent Classification (IPC) or national classification and IPC F42B3/12			
Applicant DETNET SOUTH AFRICA (PTY) LIMITED et al.			
<p>1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of 4 sheets, including this cover sheet.</p> <p>3. This report is also accompanied by ANNEXES, comprising:</p> <p>a. <input checked="" type="checkbox"/> <i>(sent to the applicant and to the International Bureau) a total of 1 sheets, as follows:</i></p> <p><input checked="" type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).</p> <p><input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.</p> <p>b. <input type="checkbox"/> <i>(sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) , containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).</i></p>			
<p>4. This report contains indications relating to the following items:</p> <p><input checked="" type="checkbox"/> Box No. I Basis of the opinion</p> <p><input type="checkbox"/> Box No. II Priority</p> <p><input type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</p> <p><input type="checkbox"/> Box No. IV Lack of unity of invention</p> <p><input checked="" type="checkbox"/> Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p><input type="checkbox"/> Box No. VI Certain documents cited</p> <p><input type="checkbox"/> Box No. VII Certain defects in the international application</p> <p><input type="checkbox"/> Box No. VIII Certain observations on the international application</p>			
Date of submission of the demand 13.05.2005	Date of completion of this report 11.01.2006		
Name and mailing address of the international preliminary examining authority:  European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465	Authorized Officer Ziegler, H-J Telephone No. +49 89 2399-2894		



# BEST AVAILABLE COPY

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.  
PCT/ZA2004/000071

### Box No. I Basis of the report

1. With regard to the **language**, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
  - This report is based on translations from the original language into the following language, which is the language of a translation furnished for the purposes of:
    - international search (under Rules 12.3 and 23.1(b))
    - publication of the international application (under Rule 12.4)
    - international preliminary examination (under Rules 55.2 and/or 55.3)
2. With regard to the **elements\*** of the international application, this report is based on (*replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report*):

#### Description, Pages

1-5 as originally filed

#### Claims, Numbers

1 received on 13.05.2005 with letter of 13.05.2005

#### Drawings, Sheets

1/1 as originally filed

a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing

3.  The amendments have resulted in the cancellation of:
  - the description, pages
  - the claims, Nos.
  - the drawings, sheets/figs
  - the sequence listing (*specify*):
  - any table(s) related to sequence listing (*specify*):

4.  This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental-Box-(Rule-70.2(c)).

- the description, pages
- the claims, Nos.
- the drawings, sheets/figs
- the sequence listing (*specify*):
- any table(s) related to sequence listing (*specify*):

\* If item 4 applies, some or all of these sheets may be marked "superseded."

# BEST AVAILABLE COPY

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.  
PCT/ZA2004/000071

---

**Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

---

1. Statement

Novelty (N)	Yes: Claims	1
	No: Claims	
Inventive step (IS)	Yes: Claims	1
	No: Claims	
Industrial applicability (IA)	Yes: Claims	1
	No: Claims	

2. Citations and explanations (Rule 70.7):

**see separate sheet**

# BEST AVAILABLE COPY

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (SEPARATE SHEET)

International application No.  
PCT/ZA2004/000071

Re Item V

The closest prior art is disclosed in US4860653. This document shows the features of the preamble of the claim.

The subject matter of the present invention differs from this known method in its characterizing features and is therefore novel (Art. 33 (2) PCT).

The problem solved by the present invention is to increase the arm time and preserve the safety of the procedure.

The subject matter of the present invention is also inventive (Art. 33 (3) PCT) because the solution proposed is not known, and therefore not obvious in view of the available prior art.

The invention is industrially applicable (Art. 33(4) PCT).

**CLAIMS**

1. A method of controlling operation of a detonator which includes an energy storage device, an energy discharge circuit and a control unit, the method including the steps of arming the detonator and, if a defined signal is not received by the detonator within a predetermined period after arming the detonator, of using the control unit to enable the energy discharge circuit thereby to cause energy to be discharged from the storage device and place the detonator in a known safe state, the method being characterised in that the defined signal is an arm-hold signal which causes the timing of the predetermined period to be recommenced and which is generated at regular defined intervals.